

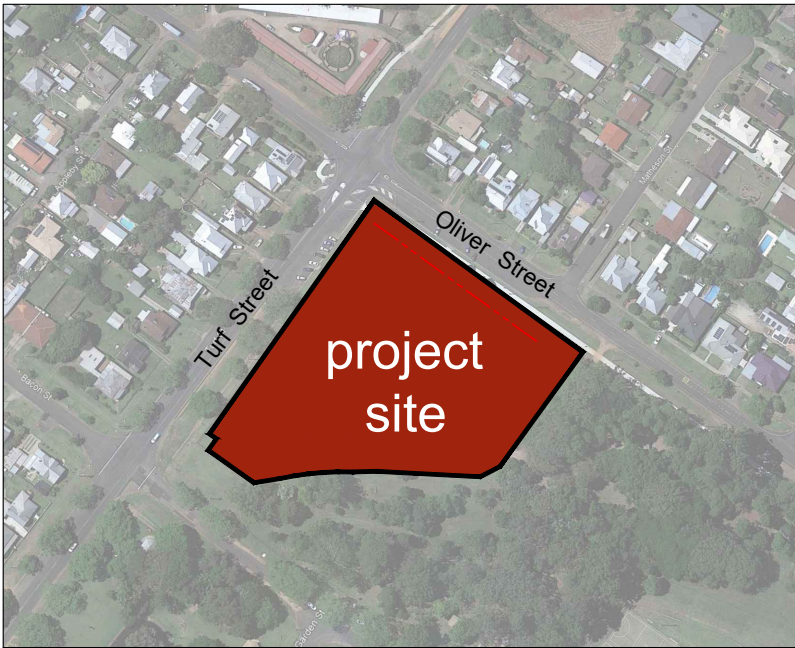
Grafton Aquatic Centre

Turf and Oliver Streets

GRAFTON NSW 2460

Landscape Plans

2113_CD_01 Issue C	Cover Sheet & Notes
2113_CD_01a Issue A	Notes
2113_CD_02 Issue C	Key Plan
2113_CD_03 Issue B	Landscape Plan
2113_CD_04 Issue C	Landscape Plan
2113_CD_05 Issue B	Landscape Plan
2113_CD_06 Issue B	Landscape Plan
2113_CD_07 Issue C	Plant Schedule
2113_CD_08 Issue B	Landscape Details



Site Location

GENERAL NOTES

DESCRIPTION OF WORKS

- This drawing package describes landscape works to the Grafton Aquatic Centre, Stage One. These drawings have been prepared for the purpose of tender and construction. The landscape works include:
 - earthworks to achieve profiles for the garden and turf areas;
 - supply and installation of concrete quick garden edge to garden areas;
 - supply and installation of irrigation to garden and turf areas;
 - subgrade preparation to all garden areas;
 - supply and installation of 300mm imported topsoil to all gardens;
 - supply and installation of plant stock to gardens;
 - mulching of all gardens with 100mm depth of cyprus mulch;
 - subgrade preparation to areas to be turfed;
 - supply and installation of 100mm imported topsoil to areas to be turfed;
 - the supply and installation of Couch turf to areas to be turfed; and
 - maintenance of landscape works for a period of 12 weeks.

SERVICES

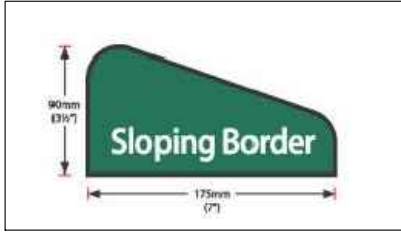
- The Landscape Contractor is to liaise with the Builder to ensure an understanding of all services. Refer to the engineering & architectural plans to confirm the location of all services.

STANDARDS

- The works are to meet industry best practice and the relevant Australian Standards including AS 4419 Soils for Landscaping and Garden Use, AS 4454 Composts, Soil Conditioners and Mulches and AS 2303:2018 Tree Stock for Landscape Use.

CONCRETE QUICK EDGE

- Supply & install concrete quick garden edge ('Kwik Kerb' or similar). Concrete quick garden edge is to have a 'sloping border' profile. See below. Concrete quick garden edge is to be finished with 'Eurobrick' finish with the colour being selected to match the brickwork of the existing building (similar to photograph below).
Note: The existing fence is to be relocated along the Turf Street frontage. Install the concrete quick garden edge in line with the relocated fence along the boundary. For the Oliver Street frontage, install the concrete quick garden edge in line with the existing fence along the boundary.



SITE PREPARATION

- Eradicate weeds using environmentally acceptable methods, such as a non-residual glyphosate herbicide, at the recommended maximum rate. Regularly remove, by hand, rubbish and weed growth throughout planted and mulched areas. Continue eradication throughout the course of the works and during the planting establishment.
- Excavate garden areas to allow for 300mm imported topsoil + 100mm mulch layer. Excavate & remove subsoil, concrete debris & other deleterious material from the planting areas to a minimum depth of 400mm below the finished surface level. Shape subgrade to fall to subsoil drains where applicable. Prior to backfilling, break up the base of the planting area to at least 100mm depth. Do not disturb services. Cultivation is to include the removal of undesirable material including stones exceeding 25mm, clods of earth exceeding 50mm & any weeds, rubbish or other deleterious material brought to the surface during cultivation.

TOPSOIL

- Imported topsoil mix is to comply with AS 4419 Clause 4.6 'Soil Blend'. Deliveries of soil to site must be from an approved supplier and must be accompanied by certification of compliance with AS 4419.
- Spread the topsoil on the prepared subsoil and grade evenly, making the necessary allowances to achieve the required finished levels and contours after light compaction.
- Prevent excess compaction by constructional plant. Compact lightly and uniformly in 150mm layers. Progressively tamp backfilling topsoil to avoid later subsidence, and thoroughly water to prevent voids. Rake over lightly to attain finished profiles. Avoid differential subsidence and produce a finished topsoil surface, which is smooth and free from stones or lumps of soil; graded to drain freely, without ponding, to catchment points;and graded evenly into adjoining ground surfaces.

FERTILISER

- Provide Terracotem fertiliser, delivered to the site in sealed bags marked to show manufacturer, weight and fertiliser type. Terracotem fertiliser is to be mixed with the topsoil prior during installation at the rate specified by the manufacturer.

PLANTS

- Supply plants which have large healthy root systems, with no evidence of root curl, restriction or damage; that are vigorous, well established, free from disease and pests, of good form consistent with species or variety; and that are hardened off, not soft or forced, and suitable for planting in the natural climate conditions prevailing in the location of planting. Use trees which have a single leading shoot. Make no substitutions unless approved in writing by the Superintendent.
- Deliver plant material to the site on a day to day basis, and plant immediately after delivery. If this is not possible, keep them in good condition on the site, adequately protected from frost, wind, sun, and vandalism by appropriate storage methods, with provision for watering the stock. All stock arriving on site should be identified and labelled.

PLANTING

- Do not plant in unsuitable weather conditions such as extreme heat, cold, wind or rain. Thoroughly water the plants before planting, immediately after planting, and as required to maintain growth rates free of stress.
- When the hole is of the correct size, remove the plant from the container with minimum disturbance to the root ball. Ensure that the root ball is moist. Prior to planting, tease out the roots gently. Place the plant in its final position, in the centre of the hole and plumb, and with the topsoil level of the plant root ball level with the finished surface of the surrounding topsoil.
- Backfill with imported topsoil. Lightly tamp down the mixture and water to eliminate air pockets. Ensure the topsoil is not placed over the top of the root ball, so that the plant stem remains the same height above ground as it was in the container.
- Apply a minium of 5 litres of water to each plant within 12 hours of planting.

TREE PLANTING

- Plant trees in the garden areas at the locations indicated on the landscape plans. Install trees as per Landscape Detail 01. Plant trees in the existing grassed area as per Landscape Detail 02. Stake all trees with two 38 x 38mm hardwood square stakes. Site stakes either parallel with the closest building wall, path or fence. Ensure stakes finish level. Tie each tree to the stakes with hessian tie with the tie in a figure of 8. Fix to the stakes with staples. Ties should hold the tree in a stable position, particularly in windy conditions, but should not be so tight that they realign the tree from its natural position. Selection of tree stock is to comply with AS 2303:2018 Tree Stock for Landscape Use.

MUCLHING

- Gardens are to be mulched to a depth of 100mm with cyprus mulch. Keep mulch away from the stems of plants and the trunks of trees. Mulch should be free of deleterious and extraneous matter such as soil, weeds and sticks. Mulch should comply with AS 4454. Place mulch to the required depth, clear of plant stems, and rake to an even surface flush with the surrounding finished levels. Spread and roll mulch so that after settling, it is smooth and evenly graded between design surface levels sloped to towards the base of plant stems in garden beds, and not closer to the plant stem than 50mm.

TURFING

- Obtain turf from an approved specialist grower of cultivated turf. Provide turf of even thickness, free from weeds and other foreign matter. Deliver the turf from the supplier within 24 hours of being cut, and lay within 36 hours of cutting. Prevent it from drying out between cutting and laying. Furnish a warranty from the supplier that the turf is free from weeds and other foreign matters.
- Supply and install Couch turf to areas to be turfed using the following methods.
- Break up the existing ground to a minimum depth of 100mm and rake smooth. Spread imported topsoil to a minimum depth of 100mm. Falls and levels of grassed areas to be accurately formed to facilitate drainage. Finished surface level of grass to be flush with adjacent grassed road reserve and back of kerb.
- Before turfing, apply fertiliser of 14:15:10 N.P.K. or approved similar composition at the rate of 100g per sq m and rake into the prepared soil. In the last week of the Maintenance Period and after mowing, apply Ammonium Sulphate fertiliser (20:0:0) NPK at the rate of 12g per sq m or other approved fertiliser at an equivalent rate of nitrogen. Prepare as a solution not stronger than 25g of fertiliser per litre of water and apply evenly to the turfed area. Lightly water after application.
- Turf shall be freshly cut Couch turf. Turf is to be free from nutgrass or other noxious weeds or any other material deleterious to plant growth. Close turf in straight lines with cross joints staggered. Lay turf line at right angles to direction of slope. Tamp down or roll lightly, ensuring any open joints are filled with a light top dressing to a depth of 10mm.

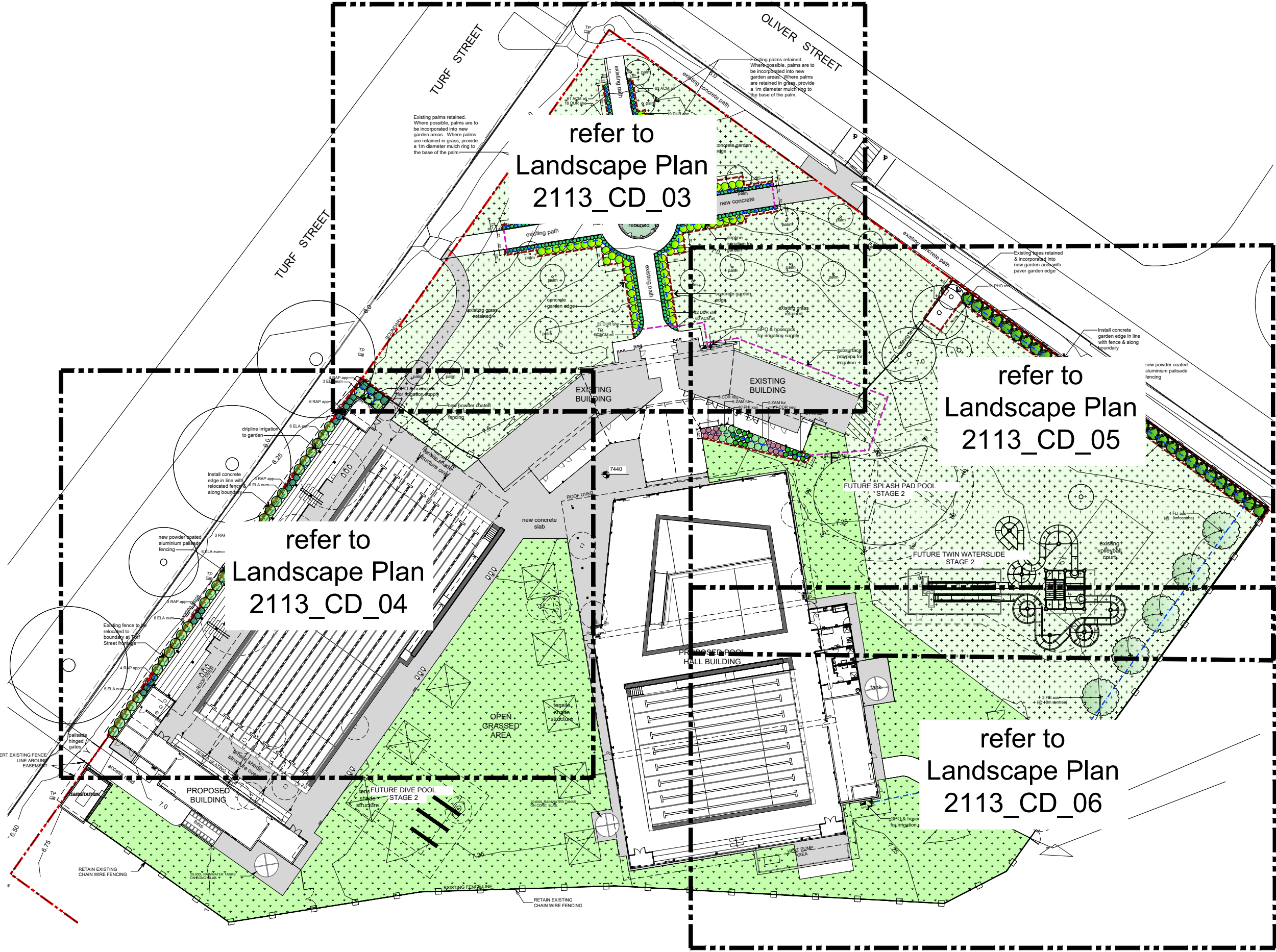
Use figured dimensions in preference to scales. Please notify the Landscape Architect before proceeding if any anomaly is found between this drawing and conditions on site. This drawing must not be relied upon for any purpose other than that for which it was prepared or by any person or corporation other than the referred client.	AMENDMENTS				PROJECT	DRAWING	DRAWN	ISSUE		Scale NOT TO SCALE metres 0	Jackie Amos Landscape Architect 46 Skehan Street Centenary Heights Q 4350 0427 667748 jackie.amos@jala.com.au	
	Issue	Date	Details	Initial								
	A	1.8.21	Client review	JA								
	B	1.9.21	Tender Documentation	JA								
© Jackie Amos Landscape Architect 2021	C	2.9.22	Grandstand planting amended	JA	CLIENT	DRAWING NO.	DATE					
					Clarence Valley Council	2113_CD_01	September 2022					

IRRIGATION

24. The irrigation system must be installed by a licensed irrigation contractor and must comply with all Council relevant standards. Water for the irrigation system is to be supplied from the town water mains. Each irrigation system is to have an automatic controller powered from the GPO with water supplied from a connection to the water mains. Refer to the landscape plan for the approximately location of the GPO and water connection. These are to be co-ordinated with the builder. The irrigation system is to have a summer target application rate of 32mm per week.
25. The water source for the irrigation is to include an isolation valve, back flow prevention Device, pressure regulator and filter.
26. A rain switch override is to be installed to cut off irrigation after a preset rainfall level has been reached. Install to manufacturer's specification with a manual override switch.
27. Mainlines and laterals to be HDPE Poly Class 12 with Plasson or Philmac type fittings. Sub-laterals to be LDPE 19mm. LDPE shall be used in garden areas only. Pipe work shall be installed with a minimum cover over the top of the HDPE of 300mm. Cover over the LDPE to be 150mm.
28. Provide 13mm diameter high grade UV stable brown poly dripline to all garden areas. Provide a maximum distance of 500mm between emitters.
29. Automatic valves shall be 25mm Hydro Rain or equivalent. Valves shall be installed in valve boxes of minimum 25mm diameter. Tops of the valves to be no more than 100mm below the valve box lid. Lids to be lockable. Valve boxes to be supported on a solid surface. Fit filter cloth to base of valve box. Fill valve box with 20mm diameter gravel up to base of valves.
30. Pop up sprinklers are to be provided to turf areas. Drip line irrigation is to be provided to garden areas. Both are to be operated by an automatic irrigation system.
31. Provide 50mm professional pop up sprinklers to irrigate the new turf area. Sprinklers to have a 4m spray radius and are to incorporate 90°, 270° and 350° as required. Sprays for sprinklers are to overlap to ensure complete coverage to all new turf area.

MAINTENANCE

32. The planting establishment period commences at the date of practical completion. The planting establishment period will extend for 12 weeks. Throughout the establishment period, carry out maintenance work including, watering, mowing, weeding, rubbish removal, fertilising, pest and disease control, staking and tying, replanting, cultivating, pruning, hedge clipping, aerating, reinstatement of mulch, and keeping the site neat and tidy. Continue to replace failed, damaged or stolen plants.
33. Water and weed turf areas as required to maintain healthy and weed free growth. Mow as required to maintain turf height. Apply lawn fertiliser immediately prior to the end of the establishment period. Remove turf clippings from the site.



LEGEND

- property boundary
- existing fence
- existing tree retained
- existing palm retained
- existing tree removed
- brick garden edge
- shrub planting to front garden (*Duranta Sheena's Gold* & *Acmena Allyn Magic*)
- shade tolerant, foliage planting
- planting to rear of grandstand wall (*Elaeocarpus eumundii* and *Raphiolepis Apple Blossom*)
- screen planting to Oliver Street (*Photinia Red Robin*)
- shade tree planting to southeast boundary (*Flindersia australis*)
- existing grass retained
- new turf
- water supply
- proposed GPO location for irrigation automatic controller. Power to be provided.
- drip line irrigation as per spec. notes
- subsurface polypipe for irrigation water to gardens

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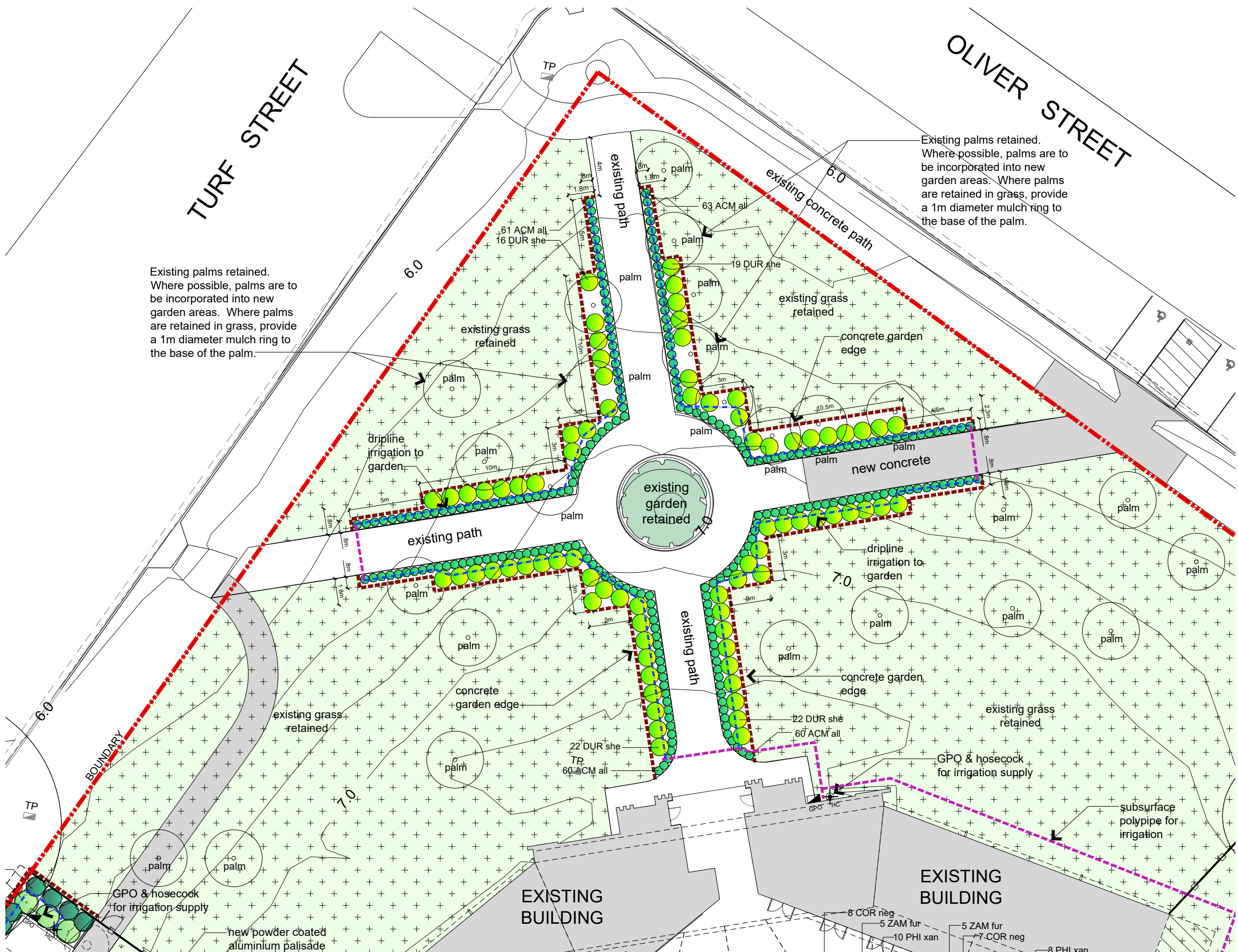
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Issue	Date	Details	Initial	Grafton Aquatic Centre		Construction Documentation		JA		C	
A	1.8.21	Client review	JA	Turf & Oliver Streets, Grafton		Key Plan					
B	1.9.21	Tender Documentation	JA	CLIENT		DRAWING NO.		DATE			
C	2.9.22	Grandstand planting amended	JA	Clarence Valley Council		2113_CD_02		September 2022			

Scale 1:600 @ A3 paper size

metres 0 3 6 9 12 15

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- LEGEND**
- property boundary
 - existing fence
 - existing tree retained
 - existing palm retained
 - existing tree removed
 - concrete quick edge
 - shrub planting to front garden (*Duranta Sheena's Gold* & *Acmena Allyn Magic*)
 - shade tolerant, foliage planting
 - planting to rear of grandstand wall (*Elaeocarpus eumundii* and *Raphiolepis Apple Blossom*)
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B	1.9.21	Tender Documentation	JA

PROJECT	DRAWING	DRAWN	ISSUE
Grafton Aquatic Centre	Construction Documentation	JA	B
Turf & Oliver Streets, Grafton	Landscape Plan		
CLIENT	DRAWING NO.	DATE	
Clarence Valley Council	2113_CD_03	September 2021	

Scale 1:250 @ A3 paper size

metres 0 1.25 2.5 3.75 5 6.25

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LEGEND

- property boundary
- existing fence
- existing tree retained
- palm existing palm retained
- existing tree removed
- concrete quick edge
- shrub planting to front garden (*Duranta Sheena's Gold* & *Acmena Allyn Magic*)
- shade tolerant, foliage planting
- planting to rear of grandstand wall (*Elaeocarpus eumundii* and *Raphiolepis Apple Blossom*)
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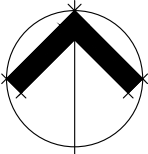
AMENDMENTS			
Issue	Date	Details	Initial
A	1.8.21	Client review	JA
B	1.9.21	Tender Documentation	JA
C	2.9.22	Grandstand planting amended	JA

PROJECT
Grafton Aquatic Centre
Turf & Oliver Streets, Grafton
CLIENT
Clarence Valley Council

DRAWING
Construction Documentation
Landscape Plan
DRAWING NO.
2113_CD_04

DRAWN
JA
DATE
September 2022

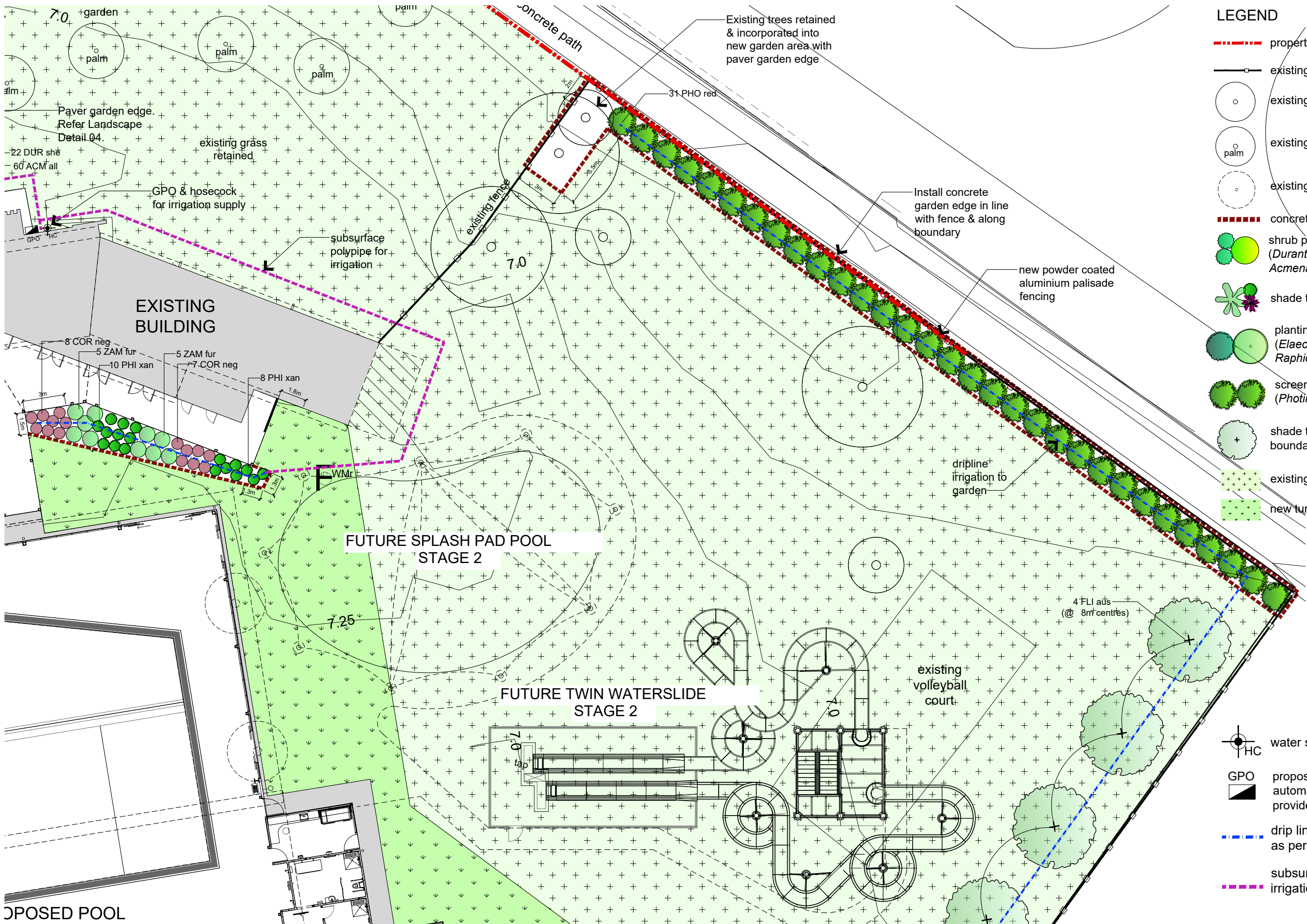
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metres 0 1.25 2.5 3.75 5 6.25

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LEGEND

property boundary

existing fence

existing tree retained

existing palm retained

existing tree removed

concrete quick edge

shrub planting to front garden
(*Duranta Sheena's Gold* & *Acmena Allyn Magic*)

shade tolerant, foliage planting

planting to rear of grandstand wall
(*Elaeocarpus eumundii* and *Raphiolepis Apple Blossom*)

screen planting to Oliver Street
(*Photinia Red Robin*)

shade tree planting to southeast boundary
(*Flindersia australis*)

existing grass retained

new turf

water supply

GPO
proposed GPO location for irrigation automatic controller. Power to be provided.

drip line irrigation
as per spec. notes

subsurface polypipe for
irrigation water to gardens

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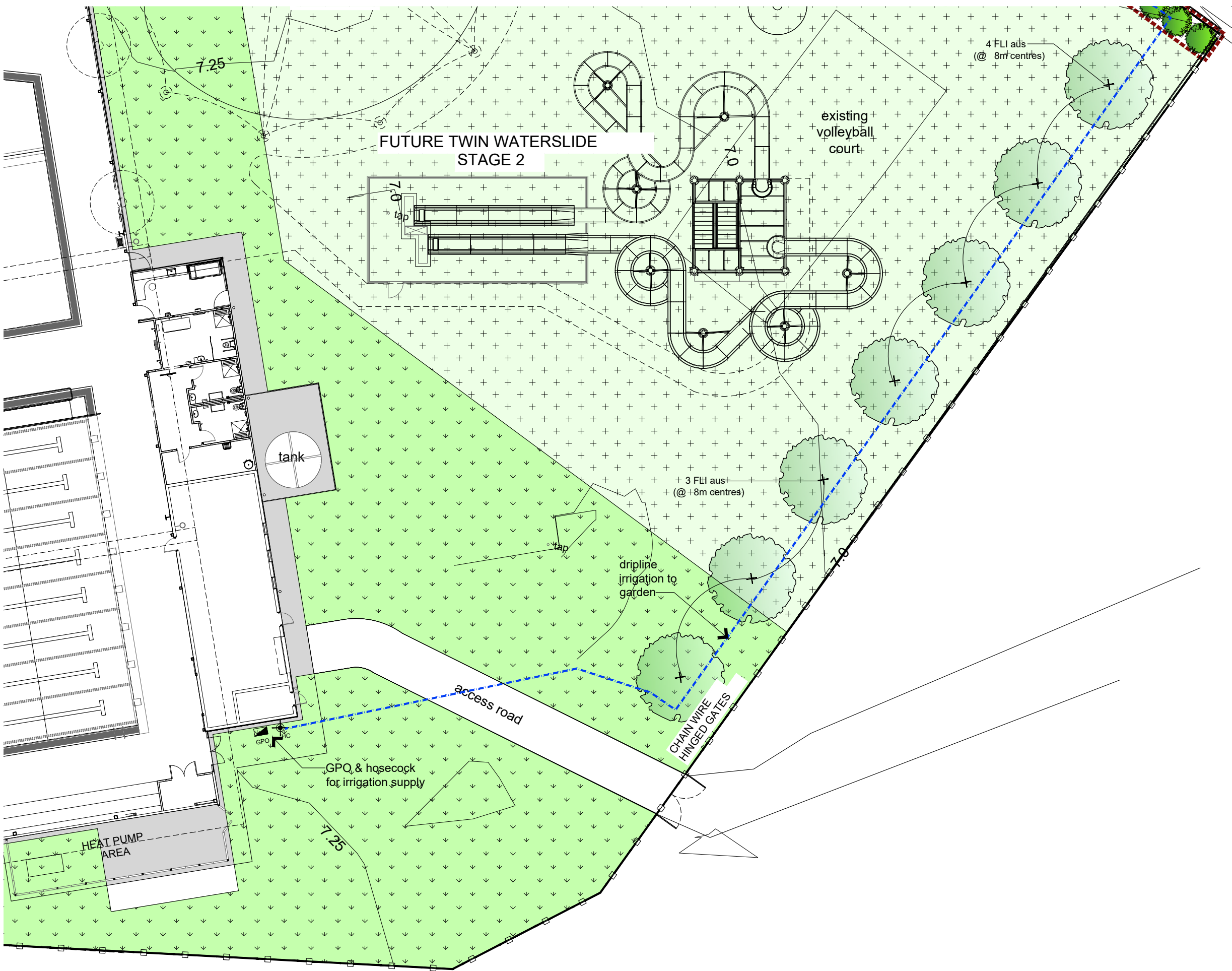
PROJECT	DRAWING	DRAWN	ISSUE
Grafton Aquatic Centre	Construction Documentation	JA	B
Turf & Oliver Streets, Grafton	Landscape Plan		
CLIENT	DRAWING NO.	DATE	
Clarence Valley Council	2113_CD_05	September 2021	

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metres 0 1.25 2.5 3.75 5 6.25

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LEGEND

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PROJECT

Grafton Aquatic Centre
Turf & Oliver Streets, Grafton
CLIENT

Clarence Valley Council

DRAWING

Construction Documentation
Landscape Plan
DRAWING NO.

2113_CD_06

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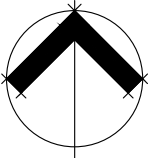
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PLANT SCHEDULE – GRAFTON AQUATIC CENTRE

Code	Botanical Name	Common Name	Ht x Wd	Pot Size	Quantity
Trees					
ELA eum	Elaeocarpus eumundii	Smooth leaved quandong	4m x 2.5m	25 litre	32
FLI aus	Findersia australis	Crow's Ash	15m x 8m	25 litre	7

Shrubs					
ACM all	Acmena Allyn Magic	Lilly Pilly cultivar	.6m x .5m	200mm	244
COR neg	Cordyline negra	Cordyline	1.8m x 1m	200mm	15
DUR she	Duranta Sheena's Gold	Duranta cultivar	1.5m x 1.2m	200mm	69
PHO red	Photinia Red Robin	Photinia	1.5m x 1.2m	200mm	31
PHI xan	Philodendron xanadu	Philodendron	.5m x .8m	200mm	18
RAP app	Raphiolepis Apple Blossom	Indian hawthorne cultivar	1m x 1m	200mm	23
ZAM fur	Zamia furfuracea	Cardboard cycad	1m x 1m	200mm	10

PROPOSED PLANT SPECIES

Trees



Cyathea cooperii
Tree fern



Elaeocarpus eumundii
Smooth leaved quandong



Flindersia australis
Crow's ash

Shrubs



Acmena allyn magic
Lilly pilly cultivar



Cordyline negra
Ti plant



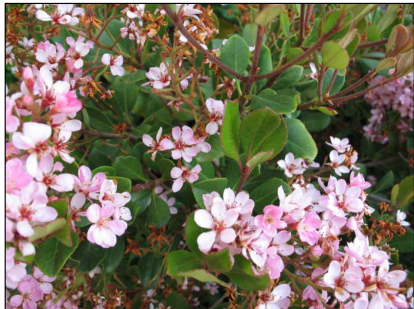
Duranta sheena's gold
Duranta cultivar



Philodendron xanadu
Philodendron cultivar



Photinia Red Robin
Photinia



Raphiolepis Apple Blossom
Indian hawthorne

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PROJECT

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Turf & Oliver Streets, Grafton
CLIENT

Clarence Valley Council

DRAWING

Construction Documentation
Plant Schedule
DRAWING NO.

2113_CD_07

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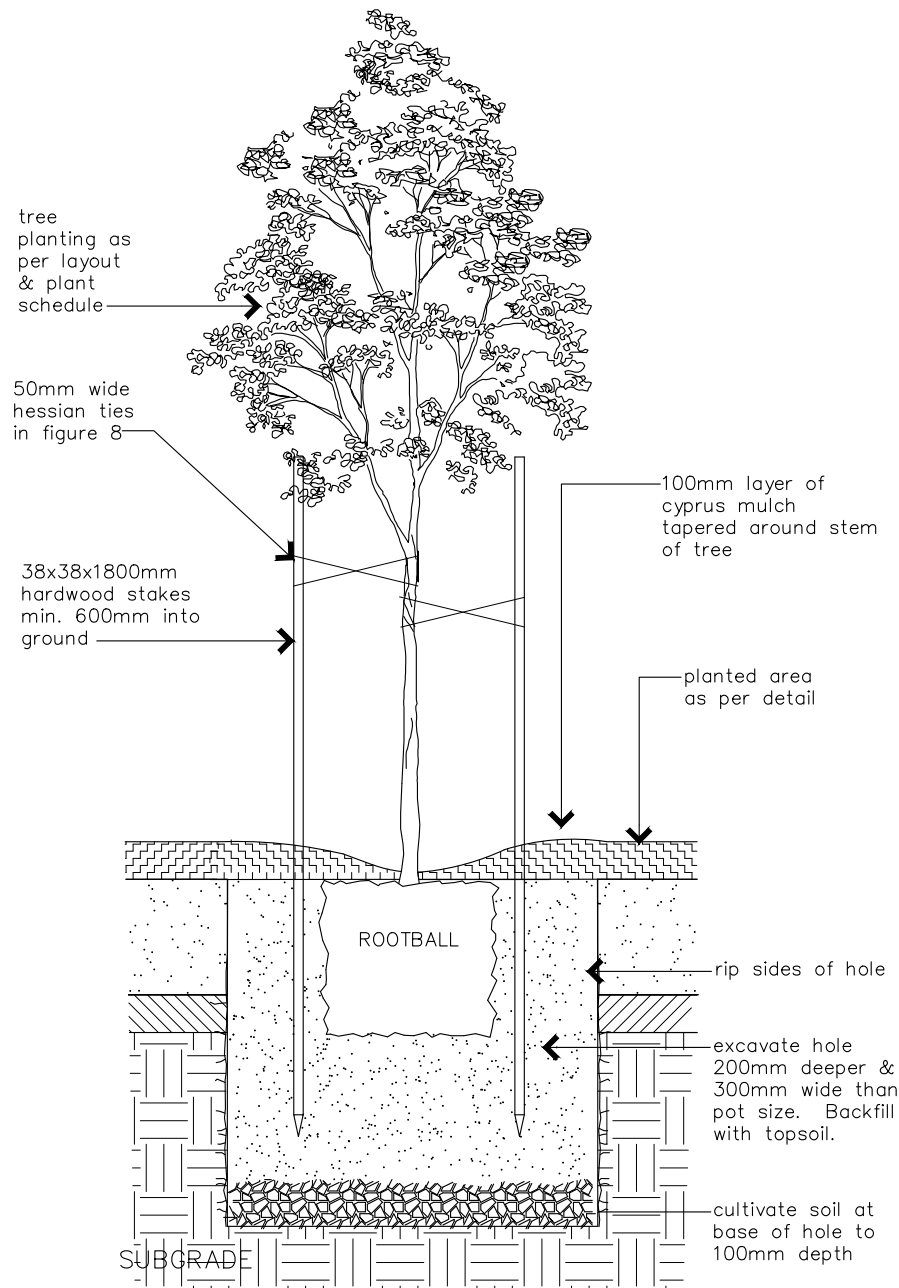
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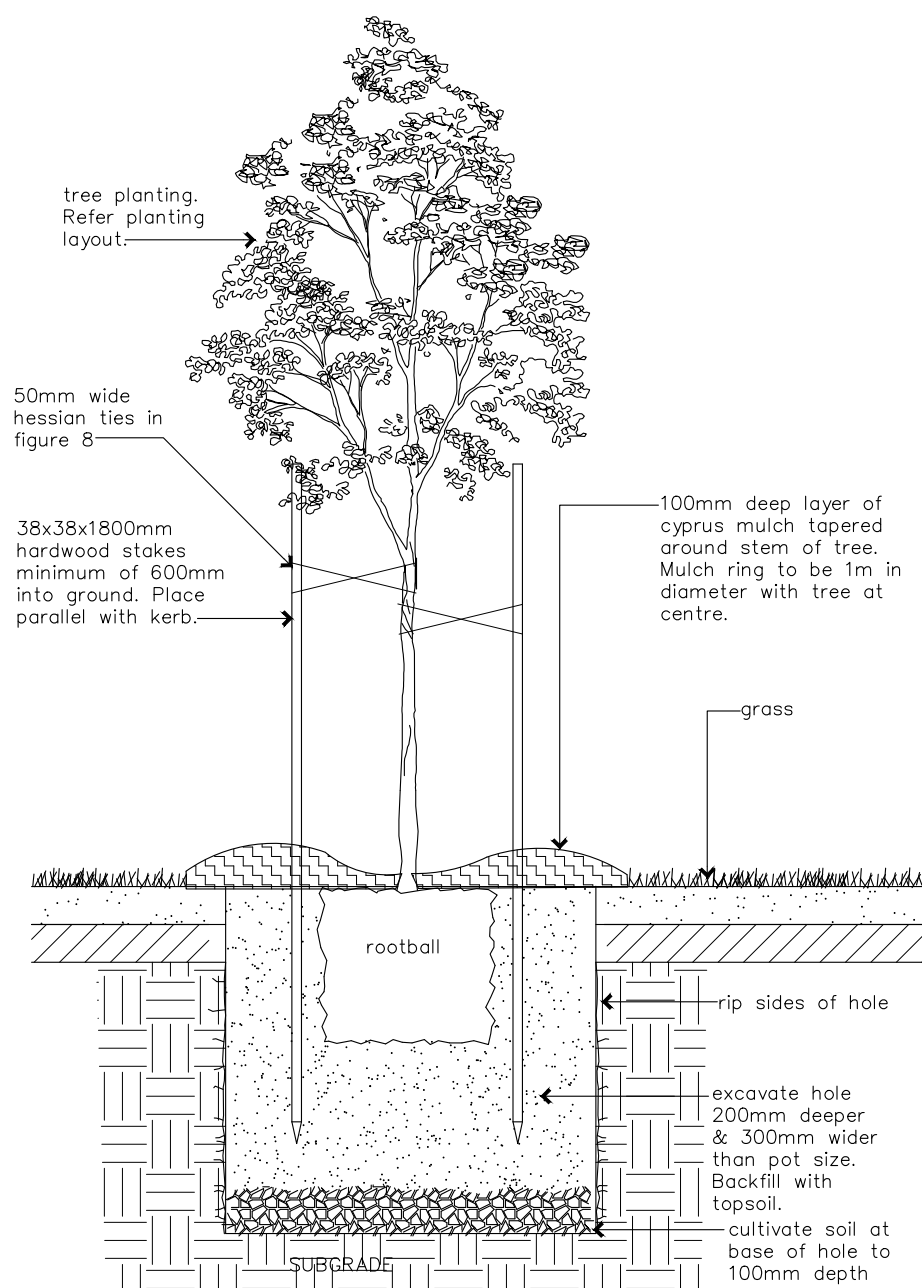
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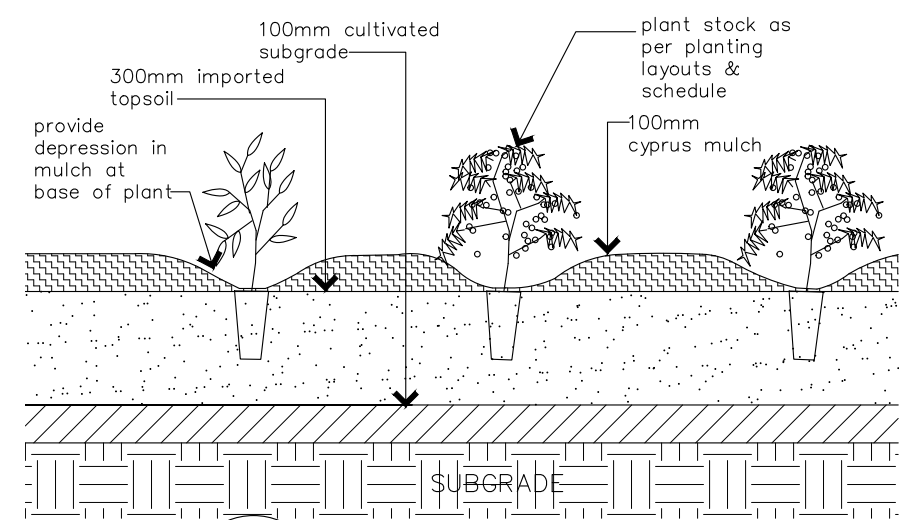




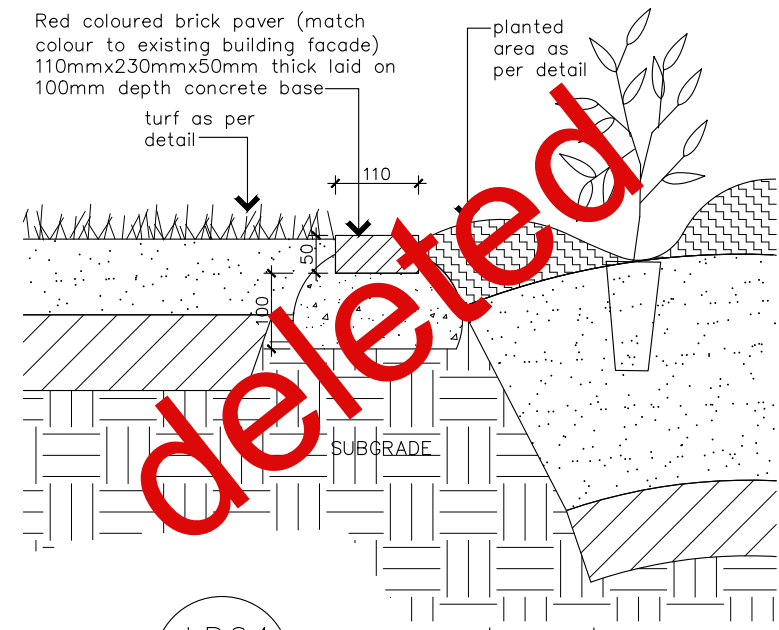
LD01 tree in garden
08 DETAIL 1:20 @ A3



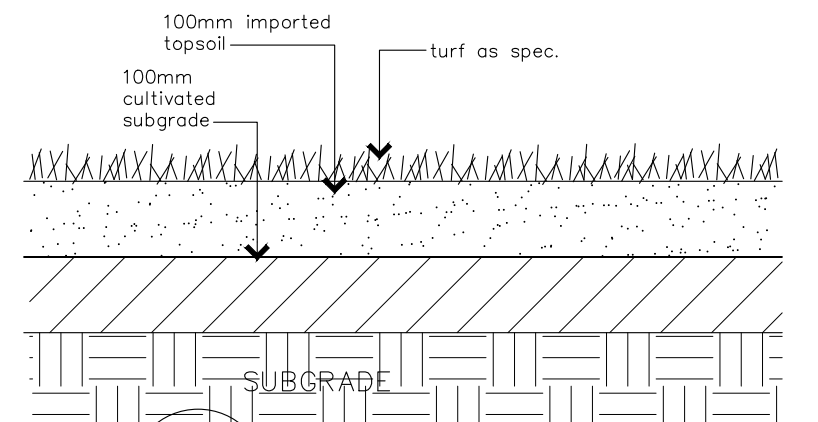
LD02 tree in grass
08 DETAIL 1:20 @ A3



LD03 garden
08 DETAIL 1:20 @ A3



LD04 paver garden edge
08 DETAIL 1:10 @ A3



LD05 turf
08 DETAIL 1:10 @ A3

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Grafton Aquatic Centre Turf & Oliver Streets, Grafton	Construction Documentation Landscape Details	JA	B
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Scale Refer individual details
metres 0

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